X-16397.ST25.txt
SEQUENCE LISTING

<110> Eli Lilly and Company

<120> Anti-Myostatin Antibodies

<130> X-16397

<140> US 60/559,621
<141> 2004-04-05

<150> US 60/555,456
<151> 2004-03-24

<160> 56

<170> PatentIn version 3.3

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Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Thr Trp Arg Gln Asn Thr
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Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
50 55 60

Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Val Ile Arg Gln Leu
65 70 75 80

Leu Pro Lys Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp Val
85 90 95

Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
100 105 110

Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu
115 120 125

Met Gln Val Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser
130 135 140

Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu
145 150 155 160

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Arg Pro Val Glu Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu
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Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu
            180                 185                 190

Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val
        195                 200                 205

Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly
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Ile Glu Ile Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val Thr
225                 230                 235                 240

Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Lys
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Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp Cys
            260                 265                 270

Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
        275                 280                 285

Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
    290                 295                 300

Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys
305                 310                 315                 320

Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala
                325                 330                 335

Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr
            340                 345                 350

Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met Val
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Val Asp Arg Cys Gly Cys Ser
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<400>  2
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Arg Tyr Pro Leu Thr Val Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile
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Ile Ala Pro Lys Arg Tyr Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu
35 40 45

Phe Val Phe Leu Gln Lys Tyr Pro His Thr His Leu Val His Gln Ala
50 55 60

Asn Pro Arg Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser
65 70 75 80

Pro Ile Asn Met Leu Tyr Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly
85 90 95

Lys Ile Pro Ala Met Val Val Asp Arg Cys Gly Cys Ser
100 105

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Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Ser Tyr Met
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His Trp Tyr Gln Gln Lys Pro Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
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Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Tyr Ser Asn Pro Leu Thr
85 90 95

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Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val His Tyr Met
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His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Leu Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala Asp
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Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
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Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Leu Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala Asp
100 105

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Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Val Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Arg Asn Pro Leu Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala Asp
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Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu

65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Tyr Ser Asn Pro Leu Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala Asp
100 105

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<400> 8

Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
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Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Asn Ser Asn Pro Leu Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala Asp
100 105

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Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met
20 25 30

His Trp Tyr Gln Gln Arg Ser Gly Ala Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Thr Tyr Asn Pro Leu Thr
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Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala Asp
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Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
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His Trp Tyr Gln Gln Lys Pro Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Tyr Ser Asn Pro Leu Thr
85 90 95

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Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
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Glu Glu Val Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Asn Tyr Met

20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Asn Ser Asn Pro Leu Thr
85 90 95

Phe Gly Gly Gly Thr Lys Leu Glu Leu Lys Arg Ala Asp
100 105

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Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Ser Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ser Leu Ser Gly Phe Ser Leu Arg Thr Ser
20 25 30

Gly Met Ser Val Ser Trp Ile Arg Gln Ser Ser Gly Lys Gly Leu Glu
35 40 45

Trp Leu Ala His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser
50 55 60

Leu Arg Asn Arg Leu Thr Ile Ser Lys Asp Thr Leu Arg Asn Gln Val
65 70 75 80

Phe Leu Lys Ile Thr Ser Val Gly Thr Ala Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Arg Arg Ala Ile Thr Thr Val Ile Gly Gly Gly Thr Met Asp
100 105 110

Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

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<212> PRT
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<400> 13

Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Ser Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser Thr Ser
20 25 30

Gly Met Ser Val Ser Trp Ile Arg Gln Ser Ser Gly Lys Gly Leu Glu
35 40 45

Trp Leu Ala His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser
50 55 60

Leu Arg Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Arg Asn Gln Val
65 70 75 80

Phe Leu Lys Ile Thr Ser Val Asp Thr Ala Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Arg Arg Gly Ile Thr Thr Val Leu Gly Gly Gly Thr Met Asp
100 105 110

Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

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Leu Thr Leu Thr Cys Ser Leu Ser Gly Phe Ser Leu Thr Thr Ser Gly
20 25 30

Met Ile Val Ser Trp Ile Arg Gln Ser Ser Gly Arg Gly Leu Glu Trp
35 40 45

Leu Ala His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser Leu
50 55 60

Arg Asn Arg Leu Thr Ile Ser Lys Asp Thr Leu Arg Asn Gln Val Phe
65 70 75 80

Leu Trp Ile Ser Ser Val Gly Thr Ala Asp Thr Ala Thr Tyr Tyr Cys
85 90 95

Ala Arg Arg Ala Ile Thr Thr Val Ile Gly Gly Gly Thr Met Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

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Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Ser Ser Gln
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Thr Leu Ser Leu Thr Cys Ser Val Ser Gly Phe Ser Leu Ser Thr Ser
20 25 30

Gly Met Ser Val Ser Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu
35 40 45

Trp Leu Ala His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser
50 55 60

Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Arg Asn Gln Val
65 70 75 80

Phe Leu Lys Ile Thr Ser Val Asp Thr Ala Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Arg Arg Ala Ile Thr Thr Val Leu Gly Gly Gly Thr Met Asp
100 105 110

Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

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Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Met Leu Gln Ser Ser Gln
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Thr Leu Ser Leu Thr Cys Ser Leu Ser Gly Phe Ser Leu Arg Thr Ser
20 25 30

Gly Met Ser Val Ser Trp Ile Arg Gln Ser Ser Gly Lys Gly Leu Glu
35 40 45

Trp Leu Ala His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser
50 55 60

Leu Arg Asn Arg Leu Thr Ile Ser Lys Asp Thr Leu Arg Asn Gln Val
65 70 75 80

Phe Leu Lys Ile Thr Ser Val Gly Thr Ala Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Arg Arg Ala Ile Thr Thr Val Ile Gly Gly Gly Thr Met Asp
100 105 110

Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

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Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ser Leu Ser Gly Phe Ser Leu Arg Thr Ser
20 25 30

Gly Met Ser Val Ser Trp Ile Arg Gln Ser Ser Gly Lys Gly Leu Glu
35 40 45

Trp Leu Ala His Ile Tyr Trp Asp Asp Asp Glu Arg Tyr Asn Pro Ser
50 55 60

Leu Arg Asn Arg Leu Thr Ile Ser Lys Asp Thr Leu Arg Asn Gln Val
65 70 75 80

Phe Leu Lys Ile Thr Ser Val Gly Thr Ala Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Arg Arg Ala Ile Thr Thr Val Ile Gly Gly Gly Thr Met Asp
100 105 110

Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
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Ser Ala Ser Ser Ser Ile Ser Tyr Met His
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<400> 19

Ser Ala Ser Ser Ser Val His Tyr Met His
1 5 10

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Ser Ala Ser Ser Ser Val Ser Tyr Met His
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Ser Ala Ser Ser Ser Val Tyr Tyr Met His
1 5 10

<210> 22
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Ser Ala Ser Ser Ser Ile Asn Tyr Met His
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Asp Thr Ser Lys Leu Ala Ser

1 5

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Gln Gln Trp Tyr Ser Asn Pro Leu Thr
1 5

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Gln Gln Trp Ser Ser Asn Pro Leu Thr
1 5

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Gln Gln Trp Ser Arg Asn Pro Leu Thr
1 5

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Gln Gln Trp Asn Ser Asn Pro Leu Thr
1 5

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Gln Gln Trp Thr Tyr Asn Pro Leu Thr
1 5

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Gly Phe Ser Leu Arg Thr Ser Gly Met Ser Val Ser
1 5 10

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Gly Phe Ser Leu Ser Thr Ser Gly Met Ser Val Ser
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Gly Phe Ser Leu Thr Thr Ser Gly Met Ile Val Ser
1 5 10

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His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser Leu Arg Asn
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His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser Leu Arg Ser
1 5 10 15

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His Ile Tyr Trp Asp Asp Asp Lys Arg Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

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His Ile Tyr Trp Asp Asp Asp Glu Arg Tyr Asn Pro Ser Leu Arg Asn
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Arg Ala Ile Thr Thr Val Ile Gly Gly Gly Thr Met Asp Tyr
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Arg Gly Ile Thr Thr Val Leu Gly Gly Gly Thr Met Asp Tyr
1 5 10

<210> 38
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<400> 38

Ser Ala Ser Ser Ser Xaa Xaa Tyr Met His
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Xaa Xaa Gly Leu Asp Cys Asp Glu His Ser Xaa Glu Ser Arg Cys Cys
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Arg Tyr Pro Leu Thr Val Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile
20 25 30

Ile Ala Pro Lys Arg Tyr Lys Ala Asn Tyr Cys Ser Gly Xaa Cys Glu
35 40 45

Xaa Xaa Phe Xaa Gln Lys Tyr Pro His Thr His Leu Val Xaa Gln Ala
50 55 60

Asn Pro Arg Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser
65 70 75 80

Pro Ile Asn Met Leu Tyr Phe Asn Xaa Lys Xaa Gln Ile Ile Tyr Gly
85 90 95

Lys Ile Pro Xaa Met Val Val Asp Arg Cys Gly Cys Ser
100 105

<210> 40
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<400> 40

Asn Leu Gly Leu Asp Cys Asp Glu His Ser Ser Glu Ser Arg Cys Cys
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Arg Tyr Pro Leu Thr Val Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile
20 25 30

Ile Ala Pro Lys Arg Tyr Lys Ala Asn Tyr Cys Ser Gly Gln Cys Glu
35 40 45

Tyr Met Phe Met Gln Lys Tyr Pro His Thr His Leu Val Gln Gln Ala
50 55 60

Asn Pro Arg Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser
65 70 75 80

Pro Ile Asn Met Leu Tyr Phe Asn Asp Lys Gln Gln Ile Ile Tyr Gly
85 90 95

Lys Ile Pro Gly Met Val Val Asp Arg Cys Gly Cys Ser
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<210> 41
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<223> X is Lys or Arg

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<223> X is Ser, Thr, Asn or Gln

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<210> 42
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<400> 42

Arg Xaa Ile Thr Thr Val Xaa Gly Gly Gly Thr Met Asp Tyr
1 5 10

<210> 43
<211> 25
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<400> 43

Ala Asn Tyr Cys Ser Gly Glu Ser Glu Phe Val Phe Leu Gln Lys Tyr
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Pro His Thr His Leu Val His Gln Ala
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acctccccca aaagatggat ttatgacaca tccaaactgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggaggctgaa 240

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accaagctgg agctgaaacg ggctgat 327

<210> 45
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<400> 45
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cagtcttcag gaaagggtct ggagtggctg gcacacattt attgggatga tgacaagcgc 180

tataacccat ccctgaggaa ccgactcaca atctccaagg ataccttgag aaaccaggtc 240

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Gly Phe Ser Leu Arg Thr Val Gly Met Ser Val Ser
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Gly Phe Ser Leu Arg Thr Leu Gly Ser Ser Val Ser
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Gly Phe Ser Leu Arg Lys Leu Gly Ser Ser Val Ser
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Gly Phe Ser Leu Arg Lys Ser Gly Ser Ser Val Ser
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<222> (10)..(10)
<223> X is Ser, Thr, Ile, Leu or Val

<400> 55

Gly Phe Ser Leu Xaa Xaa Xaa Gly Xaa Xaa Val Ser
1 5 10

<210> 56
<211> 9
<212> PRT
<213> Mus sp.

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> X is Tyr, Ser, Asn or Thr

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> X is Arg, Lys, Tyr, Ser or Thr

<400> 56

Gln Gln Trp Xaa Xaa Asn Pro Leu Thr
1 5